6. The process of claim 5, wherein the elastic material is a material taken from the group consisting of polyurethane foam, polyethylene foam, polyvinyl chloride foam, neoprene rubber foam, styrene-butadiene foam, soft polyvinyl alcohol acetal resin foam, 1,4-butadiene terephthalate resin foam, and 1,4-butadiene terephthalate resin.

7. The process of claim 2 wherein the pattern-forming roller is a non-elastic material.

8. The process of claim 7, wherein the non-elastic material is a material taken from the group consisting of aluminum and hard plastic.

9. The process of claim 7, wherein the non-elastic material is acrylonitrilestyrene copolymeric resin.

10. The process of claim 1 wherein the step of forming the coating layer comprises spraying said coating material with a spray gun for forming the plurality of projections of different heights.

11. The process of claim 1, wherein the coating material is a material taken from the group consisting of cementitious material and organic coating materials.

12. The process of claim 11, wherein the cementitious material is a material taken from the group consisting of cement, plaster, stucco, clay and mixtures thereof with a water-base synthetic resinous emulsion as a coagulant.

13. The process of claim 11, wherein the water-base synthetic resinous emulsion is a water-base emulsion of a material taken from the group consisting of acrylic resins, vinyl acetate resins, epoxy resins and styrene-butadiene latex.

14. The process of claim 1, wherein the surface of the object is a material selected from the group consisting of concrete, mortar, plaster, stucco, slate plate, calcium silicate plate, plasterboard, and precast concrete plate.

15. The process of claim 1, wherein the surface of the object is selected from the group consisting of veneer plywood, hardboard and composition board, sound absorbent and particle board.

16. The process of claim 1, wherein the surface of the object is a plate made of a metal selected from the group consisting of aluminum, iron and stainless steel.

17. The process of claim 1, wherein the pressing roll is operated manually.

18. The process of claim 1, wherein the pressing roll is operated electrically.

19. The process of claim 1, further comprising coating the decorative relief finish with a top-coat.

20. The process of claim 19, wherein the topcoat is a paint.

21. The process of claim 19, wherein the topcoat is a paint taken from the group consisting of organic paint and inorganic paint.

22. The process of claim 19, wherein the topcoat is a paint taken from the group consisting of organic-solvent-soluble acrylic paint and water-base acrylic emulsion paint.

23. The process of claim 19, wherein the topcoat is an acrylic polyurethane resinous paint of the type including two separately packaged materials which are mixed together on use.

24. The process of claim 19, wherein said topcoat contains a metallic powder.

25. The process of claim 19, further comprising, after said topcoat has dried, applying to the topcoat a paint having an appearance different from that of said topcoat.

26. The process of claim 25, wherein said further paint has a hue, brightness or shade different from that of said topcoat.

27. The process of claim 25, wherein said further paint contains a metallic powder.

28. The process of claim 27, wherein said paint is applied only to the flattened areas of said decorative relief finish.

29. An article having a substrate surface coated with the decorative relief finish process as claimed in claim 1.

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